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Ogihara et al.

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[54] **TIME DETECTING SWITCH FOR AN ALARM CLOCK**

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Related U.S. Application Data

[63] Continuation of Ser. No. 908,560, May 22, 1978, abandoned.

[30] **Foreign Application Priority Data**

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[52] **U.S. Cl.** **368/252**

[58] **Field of Search** 368/72–74, 368/109, 243, 244, 250, 252, 254, 269

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[57] **ABSTRACT**

An alarm clock comprises at least one rotationally driven rotatable time wheel, at least one rotatable detecting wheel rotatable relative to the time wheel to phases corresponding to alarm signaling times by an alarm signaling time setting wheel, and a time detecting switch having an open switching state when the time wheel is out of phase with the detecting wheel and switchable to a closed switching state when the time wheel rotates into phase with the detecting wheel to thereby enable the sounding of an alarm at preselected alarm signaling times. The time detecting switch comprises a slide switch comprising one of the time and detecting wheels being comprised of a one-piece structure composed of electrically conductive material and having a gear teeth portion for meshing with another gear and having a first set of projections which define the contact points of the slide switch, and the other of the time and detecting wheels being composed of electrically insulating material and having a switch plate connected thereto having a contact portion for making sliding electrical contact with the first set of projections.

5 Claims, 5 Drawing Figures